

NARRATIVE REPORT  
TARGET ROCK NATIONAL WILDLIFE REFUGE  
HUNTINGTON, NEW YORK  
1970

C.O.

2/16/71

## TARGET ROCK NATIONAL WILDLIFE REFUGE

Target Rock Refuge was established on December 15, 1967, with the donation of their estate by Mr. and Mrs. Ferdinand Eberstadt. The 80-acre refuge is presently being developed into an administrative headquarters for the Long Island national wildlife refuges which include Conscience Point N. W. Refuge near North Sea, Morton N. W. Refuge near Sag Harbor, Oyster Bay N. W. Refuge, and Wertheim N. W. Refuge on Bellport Bay. Its additional use as an environmental education center by local colleges is in the planning stage.

MANAGEMENT. Target Rock Refuge has an excellent interspersed of habitat types and is a natural home for many types of wildlife. A portion of the grounds is cultured gardens. Rhododendron and azalea blooms make spring hiking an exceptional treat. A large portion of formerly cultured woodlands will be allowed to revert back to natural growth to enhance the area's interpretation program. A system of trails will be maintained to allow access throughout the area.

WILDLIFE. The refuge has a variety of bird and mammal life. Of special interest is the concentration of warblers during their May migration. Resident species of mammals include cottontail rabbits, raccoons, and gray squirrels. Bobwhite quail, ring-necked pheasants and mourning doves also reside on the refuge. Occasionally mallards, black ducks, and Canada geese are seen on the brackish pond near the beach. Silently approach the pond or the beach and you may observe a variety of shore and wading birds throughout the seasons. The Long Island area provides habitat to large concentrations of wintering waterfowl and these rafts of ducks are often seen from the shore of Huntington Bay.

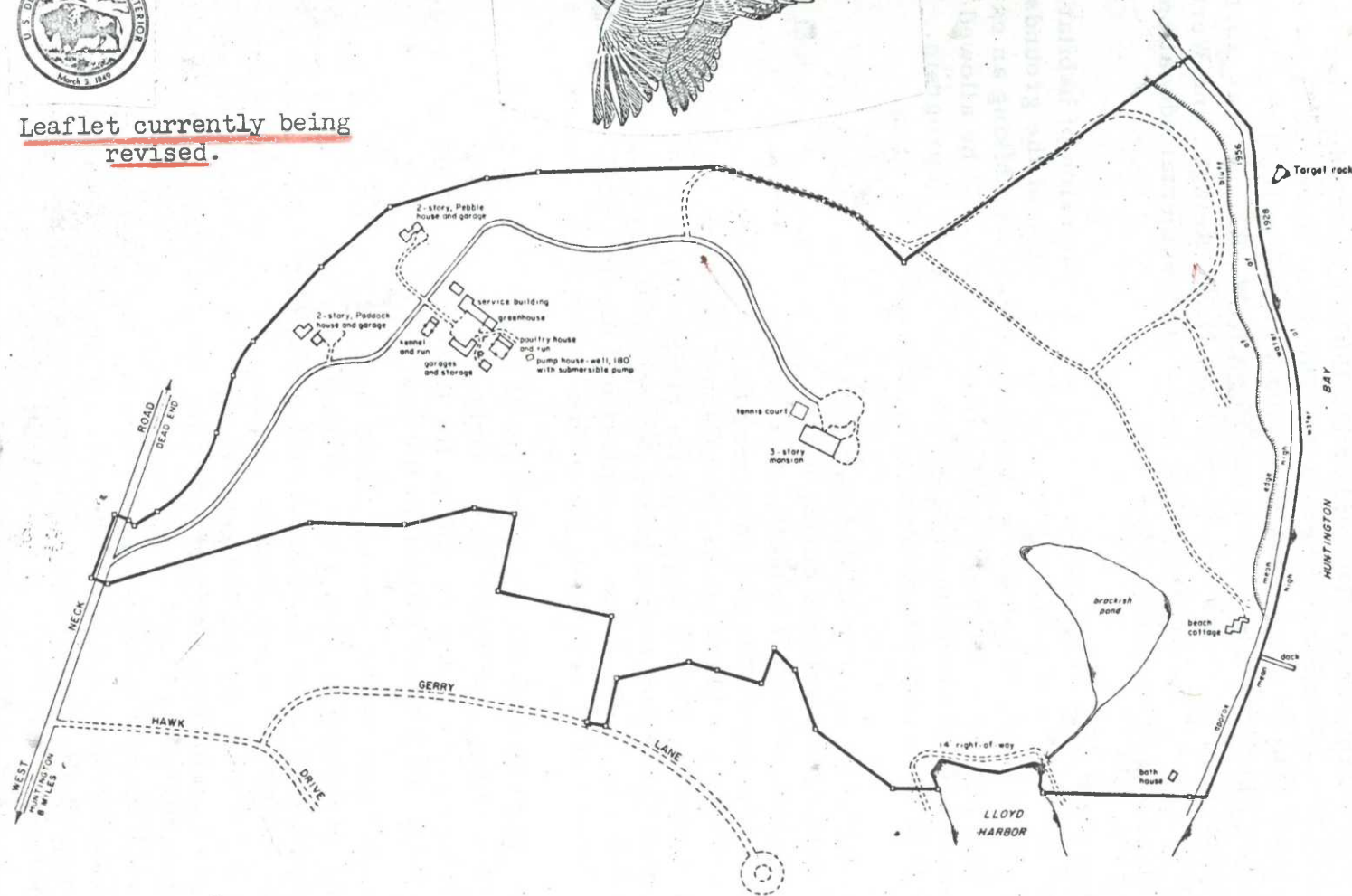
PUBLIC USE. Target Rock Refuge does not lend itself to unlimited public use because of its restricted access and small size. Only restricted use is allowed. The refuge is open from 9 a.m. to 6 p.m. daily, for the purpose of hiking, photography, and nature study. Pets must remain in the designated parking area.

Emphasis will be directed toward the use of the area by educational groups for an outdoor classroom. It will be an area where students and teachers may readily study the interrelationships found in nature. A self-guiding system of nature trails and trail guide will be developed for this purpose. At present the grounds and scenery afford refreshing views for the general sight seeker. Some strenuous hiking up and down hills is required. Individuals using the trails are cautioned to keep children away from the steep bluffs along the bayshore. A major point of interest is the large rock for which the refuge is named. The 14-foot-high white rock stands a short distance from the shoreline near the north boundary of the refuge. The British reportedly used it for target practice during the Revolutionary War, at which time the rock was imbedded in the bluff, long since eroded away, leaving the rock fully exposed. Additional information concerning the refuge may be obtained at the office near the entrance, on weekdays from 8 a.m. to 4:30 p.m. Mail address is: Refuge Manager, Target Rock N. W. Refuge, Target Rock Road, Huntington, New York 11743. Telephone (516) 271-2409.





Leaflet currently being  
revised.



# TARGET ROCK NATIONAL WILDLIFE REFUGE



UNITED STATES DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
BUREAU OF SPORT FISHERIES AND WILDLIFE



NARRATIVE REPORT  
TARGET ROCK NATIONAL WILDLIFE REFUGE  
JANUARY - DECEMBER, 1970

REFUGE PERSONNEL

George E. Gage (EOD 6/5/70).....	Refuge Manager
Michele F. Sleva (EOD 9/8/70).....	Clerk-Typist
Rocco J. Coronato (EOD 4/6/70).....	Maintenanceman
Julius Wuest (EOD 4/6/70 - Term. 7/31/70).....	Maintenance Helper
Michael Ambrosio (EOD 7/20/70 - Term. 9/30/70).....	Laborer (Temporary)
Bruce Q. Blunt (EOD 10/4/70).....	Laborer (Temp. Int.)
David B. Concar (EOD 7/17/70 - Term. 8/22/70).....	Y.O.C.
Anthony M. Guerriero (EOD 7/13/70 - Term. 8/28/70).....	Y.O.C.

Target Rock National Wildlife Refuge was established on December 15, 1967 on donation of their 80 acre estate by Mr. and Mrs. Ferdinand Eberstadt. Active management began on April 6, 1970 after the life use reservation was relinquished. The refuge serves as administrative headquarters for all of the Long Island National Wildlife Refuges.

UNITED STATES DEPARTMENT OF THE INTERIOR  
FISH & WILDLIFE SERVICE  
BUREAU OF SPORT FISHERIES & WILDLIFE  
SUFFOLK COUNTY, HUNTINGTON, NEW YORK



## TABLE OF CONTENTS

GENERAL.....	1
WILDLIFE.....	3
REFUGE DEVELOPMENT.....	6
RESOURCE MANAGEMENT.....	8
FIELD INVESTIGATIONS.....	8
PUBLIC RELATIONS.....	9
OTHER ITEMS.....	14

NARRATIVE REPORT  
TARGET ROCK NATIONAL WILDLIFE REFUGE  
JANUARY - DECEMBER, 1970

I. GENERAL

A. Weather Conditions.

No attempt was made to record weather data during the initial eight month period of refuge activity. Weather data is not directly available from either of the two nearest official weather stations. Neither the nearby Eaton's Neck Coast Guard Station nor the interior Mineola station keep complete records and the deviation between all Long Island stations varies appreciably, both in temperatures and precipitation, due to the island's complex topography and associated water masses. A comparison of data from various stations shows that the north shore has a lower average annual precipitation and higher average summer temperatures than the south shore. Inland winter temperatures average several degrees lower than the north shore. The average annual precipitation for the locality should be approximately 45 inches, including 26 inches of snow, but in recent years it has remained far below the twenty year average. Total annual precipitation at the Mineola Weather Station this year was only 30.9 inches.

An official weather station was erected at Target Rock in November by the Environmental Science Service Administration, USDC. Future records will be specific, maintained by refuge personnel.

Some general conditions bear mentioning. Temperatures in June and July reached a high of 88 degrees locally and the months were generally warm and humid. Adequate precipitation prevailed through mid-June, then precipitation became an oddity except for one August storm which deluged the area with 1.87 inches of rainfall in a two-hour period. September was warm and dry with a maximum temperature of 94 degrees; only 0.93 inches of precipitation fell locally. October rainfall was also low but a return to normalcy began in November.

On September 25, a storm with winds up to 100 miles-per-hour was recorded on Long Island. Destruction of property was heavy in some sections, but only strong winds and light rain were experienced on

the refuge, resulting in some broken branches.

October's mild weather resulted in late Autumn colors. November was also mild, the first frost occurring on November 17 - a very late date.

December began with three mild days of temperatures above 60 degrees. However, the last two weeks of the year were uniformly cold with a low temperature of 14 degrees. Two gale-force wind storms caused considerable trail litter but did not result in any damage to landscaped areas.

#### B. Habitat Conditions.

1. Water. The refuge has a small brackish pond which is periodically inundated by extreme tides. Water control is not currently planned.

Normal north shore tidal fluctuation is 7.5 feet with storm seiches accounting for extreme Long Island Sound and Huntington Bay tides of up to 12 feet. Notable extremes occurred in mid-September, October and late December.

2. Food and Cover. The refuge has an excellent interspersed of vegetative types. Although the refuge is primarily covered with an overstory of deciduous hardwoods, past culture of the understory has resulted in a wide variety of plantings throughout the estate providing good food and cover, somewhat unnaturally, but very effectively. Most of the former cultured understory will be allowed to revert to native growth to provide additional cover and a more natural setting for environmental interpretation. The oaks normally provide a heavy mast crop and former fields that have been undisturbed for years are growing over with a formidable tangle of greenbrier, bitter-sweet and brush, providing excellent protection to wildlife.

The refuge's half-acre pond supports a dense growth of widgeon-grass and an unsampled variety of aquatic life which apparently is adequate enough to entice a few waterfowl and many wading birds to the refuge.

The refuge currently has approximately five acres of landscaped area in addition to two miles of trails and several acres of lawn. The primary plantings are Korean boxwood, azaleas, and a multitude of hybrid rhododendrons. There is a formal garden and an arboretum featuring other exotic species of flowers and shrubs, plus an excellent variety of native wild flowers. In the past, each plant was individually nurtured by a host of gardeners and grounds' keepers. The lawns and the lower arboretum were intensively managed and a complicated sprinkling system maintained in the arboretum and on the aged front lawn. With our limited staff, this expansive program could not be continued; indeed, just the basic mowing of the



lawns and trimming of primary hedges usurped our manpower. The lawn situation became critical with the extended dry period and the trampling of many feet. The main lawn dried up, the hedges withered and about a dozen rhododendrons died by September. Patches of lawn did not recover and will require rebedding; other areas only reseeding. Since we will never be able to retain all of these landscaped areas and have no need for them, priorities will be set to maintain supporting landscaped grounds and let those not needed in our program revert to whatever they will - naturally. This action will be decried by persons who have seen the estate in all its well-groomed glory but we have no alternatives within the framework of our current economic structure.

## II. WILDLIFE

### A. Migratory Birds.

1. Waterfowl. No attempt has been made during this initial report period to maintain formal waterfowl records. Waterfowl use of the refuge is very light. Fourteen Canada geese ventured into the refuge pond in July, the only observation of this species. A pair of mallards frequented the pond throughout the year but are believed to be, like the geese, of local estate stock. Up to 50 free-flying geese reside at Heckscher Park in Huntington and both mallards and Canada geese reside on the Livingston estate and elsewhere on Lloyd Harbor, along with pekings and other "funny" ducks. Up to 30 feral black ducks frequented the refuge pond during the fall. One male hooded merganser was observed in November.

Lloyd Harbor is a sheltered wintering area for many species of waterfowl. In the past, large concentrations gathered here but the greatest numbers observed in 1970 were recorded in the January Audubon count when up to 1,800 black ducks and 7,600 greater scaup were present. Peak fall concentrations were even lower: 300 Canada geese, 430 black ducks and 2,600 scaup. During the period September through December, up to 30 canvasback, 52 hooded mergansers, 360 bufflehead, 600 American goldeneye, 20 gadwall and 18 American widgeon were also observed in the harbor.

Offshore on Huntington Bay the picture was somewhat better. The offshore area in the vicinity of Target Rock and north along the shore received good use beginning in late October. Concentrations of up to 3,600 greater scaup, 600 red-breasted mergansers, 450 goldeneye, 325 bufflehead, 300 black ducks, 1,200 scoter (primarily white-winged, but a few common and surf), 20 oldsquaw and an occasional eider. No brant were observed.

2. Other Migratory Birds. Mourning doves were present throughout the period. They are known to nest locally but no nests were found on the refuge. The peak number of doves recorded was 22 in early September. A single woodcock was observed on several occasions in October and early November.

B. Upland Game Birds.

Ring-necked pheasants reside on the refuge as do bobwhite quail. Up to 38 pheasants have been recorded on early morning counts. Three broods were observed and one nest with a clutch of twelve eggs was found. Two broods of quail were seen during the summer. One covey of 14 quail was observed on the last day of the year, believed to be the only quail wintering on the refuge.

One of the major predators on upland game bird nests were several crows which were present throughout the summer. Another culprit was the female German sheppard which resided on the estate through early July. On four separate occasions she was observed with pheasant eggs in her mouth, which contributed to her early removal along with her rather ferocious mate.

C. Big Game Animals.

None on this refuge. The urban pressures appear to be too great for the white-tailed deer in western Suffolk County. Like most of the local governments, the Incorporated Village of Lloyd Harbor does not condone the confinement of pets and a leash law does not exist for dogs. From our experience with refuge dog problems thus far, a deer wouldn't stand a chance here.

D. Fur Animals, Predators, Rodents and Other Mammals.

Muskrats are occasionally seen on the brackish pond. Cottontail rabbits are common but not a problem. Grey squirrels are abundant throughout Lloyd Neck. On one occasion this fall, eight road-kills were observed on a two-mile stretch of the Lloyd Harbor Road.

The locations of two raccoon den trees are known. One den immediately adjacent to the beach road has a photogenic individual who always suns himself at the entrance, much to the delight of the camera clubs. Two immature raccoons were found dead under an apple tree in September. No physical signs of violence were evident.

Opossum were seen on several occasions. A single red fox was observed in September and mink tracks observed in December testified to at least an occasional visit.

#### E. Hawks, Eagles, Owls, Ravens and Magpies.

Hawks seen during the period included sparrow, marsh, red-tailed, and, on one occasion in the late fall, a rough-legged hawk. Except for the sparrow hawk, all are infrequent visitors, the marsh and red-tailed hawks being commonly seen locally but not on the refuge.

A single immature bald eagle was observed in the vicinity of the refuge in early December and frequented the pond at Caumsett State Park for a week.

Screech owls arrived in early September. Up to five individuals could be heard by mid-month. One screech owl roosts in the porch of the beach cottage. No great-horned owls heard or seen but a long-eared owl was observed in December.

Common crows are all too common throughout the year. A small roost of up to forty crows was found just northwest of the refuge property. Their gluttonous feeding on bittersweet berries was observed on several occasions during the late fall.

#### F. Other Birds.

Although shorebird use is negligible, common and least terns have been observed over the refuge pond. Black-backed, herring and ring-billed gulls are common along the bay. The occasional observation of horned grebes, common and red-throated loons and cormorants spark the birder's interest. The green, great blue, yellow-crowned and black-crowned night heron are commonly seen around the refuge pond. More infrequent visitors are the snowy egret and American bitterns.

The large concentrations of warblers, especially during their May migration, is a spectacular sight. One of the local Audubon women stated that "the shrubbery drips warblers" and they do give that appearance. On the other hand, the flocks of common grackles, red-winged black birds and starlings are not in the least inspiring. The grackles remain to rob nests and multiply throughout the summer months.

#### G. Fish.

The refuge pond has not been surveyed to determine the species present. Offshore in Huntington Bay, blackfish, flounder, bluefish and striped bass may be found. The Target Rock shoreline is well known for its bluefish and striped bass and, in season, the rocky offshore waters are trolled around the clock. One of these fishermen is Maintenanceman Coronato who took his weight in both species, the largest being a 22 pound striper caught on October 13. Offshore pots produce good catches of lobster and in Lloyd Harbor the clamming is excellent.



#### H. Reptiles.

The Eastern garter snake was observed on several occasions, being the only species recorded.

Both Eastern box turtles and wood turtles were recorded. A snap-ping turtle was seen in the refuge pond on one occasion.

#### I. Disease. None.

### III. REFUGE DEVELOPMENT AND MAINTENANCE

#### A. Physical Development.

1. Real Property. All structures were inventoried. Three items of real property were declared excess: the small bathhouse, the dock with floating ramps and the 100-foot standing pier. The pier had previously been used for the Eberstadt yacht and seaplane and heavy equipment will be required for its removal. The rest of the excess property may be floated away.
2. Personal Property. The removal of articles of personal property by the Eberstadt family began in April and continued through July 6. Since there are four children and fifteen grandchildren, the removal was a complex and sensitive situation. In all, 16 vanloads of personal property were removed to residences in New York City, Maine, Maryland and Missouri. A total of three and one-half tons of library books were donated to the College of the South, Shawnee, Tennessee. About two tons remain.

All remaining personal property was appraised and inventoried for the Eberstadt estate by a certified appraiser in July. Nearly 400 items were listed in a Proposed Deed of Gift. Although it had been anticipated that the main house would be turned over to the Bureau intact (complete with furnishings), such was not the case. Only a few miscellaneous furnishings remain. At the request of relatives, Mrs. Eberstadt also struck several items, such as a Boston whaler with a 75 horsepower motor, a cat sailboat, a 1965 Dodge stationwagon and other miscellaneous items from the Proposed Deed of Gift. The Bureau, however, did receive a 1951 Dodge truck, a Farmall tractor, power mowers and all the facility's tools.

Some items are of no use in the refuge program but may have antique value and be of interest to the Smithsonian Institute or one of the museums. Such items will be disposed of as soon as the estate is settled, giving us needed working room. Included are a 1928 Cletrac crawler, iron-wheeled trailers and fire apparatus.

3. Buildings. Target Rock has some of the finest buildings in the refuge system although some date back to the 1920's. The earliest one to be constructed was the superintendent's building which is now the office/shop complex. The horse stables, dog kennels, mansion (main house), pebble house and paddock house followed in order of their listing. All are sound structures; their exteriors of cypress siding with slate roofs or, in the case of the mansion, brick with slate. However, they still require extensive maintenance. One problem is their exterior trim. No painting has been carried out in six years and their appearance has depreciated. And it goes deeper than appearance. All the wooden shutters on the office building, which includes an apartment, are rotten and falling apart. The mansion has 43 pairs of shutters, a third of which should be replaced. The heating systems, electrical systems and plumbing were the best available in their day but are now causing minor emergency repairs at frequent intervals. Much interior painting is required as well.

One of our first jobs was to strip the interiors of the horse stable, dog kennel and the lower floor of the former Wuest residence so that renovation for refuge use could begin. Office establishment began when Maintenance Helper Wuest retired in July and vacated his premises. By early September the office unit had received new vinyl tile floors, accoustical ceilings, flourescent lighting and a paneled reception room. The main office room was ready for occupancy, complete with furnishings, by October. Plastering and painting of the remainder of the unit was nearly completed by the end of the year. In addition, a bathroom was completely renovated for office use, the porch and walk repaired and storage closets painted.

The shop unit received bulletin boards, tool boards, a work bench, minor electrical rewiring and, most important of all, some basic hand and power tools to work with.

Refuge personnel painted the entire kitchen in the manager's residence, complete with trim. The living room ceiling also got a face-lifting, its first in nearly two decades.

Nothing other than clean-up and closure was accomplished at the main house. It will definitely require improved lighting. Some plaster repairs are in order and a good deal of contracted painting. The heating system was maintained throughout the colder months to prevent interior damage to the building.

4. Posting and Fencing. The entire boundary of the refuge was posted during the report period, as were all the Suffolk County refuges. A standard pipe gate was constructed and erected at the refuge entrance. No fencing was carried out.

5. Roads. Minor repairs were completed and drains periodically cleaned. The main road is paved and has pebbled gutters with a complete drainage system.

The fact that the refuge is at the end of the road creates a problem. Anyone who is lost, looking for Caumsett State Park, or just out to see how the better half live end up at our entrance. When the gate was closed this created a major bottleneck as the road is narrow and there was no adequate place to turn around. To aid the flow of traffic back down the road, a traffic loop was laid out, cleared and surfaced. Although the property is narrow in the vicinity of the entrance the cul-de-sac is wide enough for the average bus, truck or airstream camper.

- B. Plantings. None.
- C. Collections and Receipts. None.
- D. Control of Vegetation.

No chemical or mechanical control of vegetation was carried out except routine mowing of lawns, periodic field mowing, weeding in formal gardens and minor clearing of overhanging limbs along trails. However, these activities accounted for approximately one man-year of maintenance work at this facility.

- E. Planned Burning. None.
- F. Fires.

None during this period. Due to the heavy overstory of hardwoods, the fire danger in fallen leaves and humus during dry periods of the late fall and early spring could be great. The nearest fire apparatus is fifteen minutes away under ideal conditions and future conditions may warrant temporary closure of the refuge during periods of high fire potential to protect not only the premises but the surrounding community (twenty-eight homeowners reside on wooded two-acre plots immediately adjacent to the refuge's southern boundary).

#### IV. RESOURCE MANAGEMENT

Not applicable.

#### V. FIELD INVESTIGATIONS OR APPLIED RESEARCH

Not applicable.



## VI. PUBLIC USE

### A. Recreational Use.

Some background is required. Long Island currently has a population of over 2.5 million people, primarily crowded into the western third of its 150-mile length. Ten million people reside within a normal hour's drive of the refuge. With this population, all forms of recreational outlets receive tremendous pressure. The outdoor recreational facilities are understandably limited, having to compete for existence with industrial and residential development. Shore frontage now runs as high as \$5000 per acre-foot; building lots as high as \$50,000. Open space is fast becoming a priceless commodity. Parks and beaches are crowded; most have fees, many require reservations. There are few places left where the average urbanite can swim, picnic, walk a dog or wander through a woods without exhaustive prior arrangement.

Lloyd Neck is an exclusive residential area which receives considerable sight-seeing pressure due to its wooded beauty, large estates, fine homes and scenic bays and harbors, but it affords the public no access to them. The road leading to Target Rock is narrow and winding, the refuge situated at its natural end. The public had always turned around and gone meekly back the way they had come because everything on the neck was emphatically private. The status quo remained unbroken until the Eberstadts donated their estate. When it became known that here was a place to get out of the car, hike, visit a mansion..., the public flocked in.

The refuge was officially opened to hiking, nature study and photography on June 10th. During the next two months many people inquired about use of the area and were told that it was being held for the exclusive use of nature-oriented groups and that an educational program would evolve. Less than a dozen persons visited the refuge during this period. One of these persons was a news reporter. Believing that the refuge could be better used if educational groups knew of its existence, the manager allowed the reporter full access to the property, cautioning the intended purpose, even giving the reporter a copy of the public use regulation to assure clarity of the intended article. The article was submitted without the refuge manager's review, forgotten for the problems of the day and three weeks later the manager left on vacation. Two days after his departure, the appended feature article appeared in the Sunday edition of the Long Island Press, resulting in an immediate response and near disastrous results. On that day alone, an estimated 1,500 persons visited the 80-acre estate, drawn by the uncensored visions of grandeur so aptly conveyed in the article. The rest of the story is told in the appended news articles and need not be repeated here. A total of 9,000 visits were made prior to going onto the reserva-

tion system in October. Over 1,100 visits were recorded over the Labor Day weekend alone and hundreds were turned away both before and after activation of the reservation system; during one peak period, up to an estimated 60 carloads an hour. The problem is still not fully resolved because it seems that individuals and families will register weeks in advance to hike for an hour while others will simply park their cars and enter despite regulations and signs. Considerable administrative time and public control will still be required during the May - October period, especially during the spectacle of the May blossoms and autumn colors.

The intended and only feasible use of this small facility is as a limited environmental studies area. A tentative plan was submitted and approved for a cooperative environmental education program with the Suffolk County Office of Progressive Education (SCOPE). Their program would include use of the main house for short in-service teacher's courses and student programs. Secondary use of the refuge by school groups and nature-oriented organizations for interpretive purposes will continue on a scheduled day-use basis. A self-guiding trail system will be developed with limited support facilities - toilets, a small permanent parking area and a visitor contact station.

Although much of the initial use was not wildlife-oriented, many school groups, scouts, camera clubs, birders and other nature affiliated groups made excellent use of the premises. A total of 230 students from local high schools and colleges came with instructors specifically for ecology and field botany class work. See appended annual Recreational Use Report.

#### B. Refuge Visitors.

Regional office personnel visiting the refuge included: Messrs. Horn, Bernath, Gladdys and French in April (management considerations); Messrs. Zook, Tornstrom, Irland (surveying), Forward (training) and Radway (inspection) in May; Regional Refuge Supervisor Horn in June (inspection); Public Use Specialist French in August (people problems); Messrs. French and Suich (planning) and Messrs. Warner and Peer (realty) in September.

Assistant Refuge Manager Fred Schmid made occasional trips from Morton and infrequent visits were made by personnel from Bombay Hook, Great Swamp and Montezuma refuges. U.S. Game Management Agent Edward Baker made a courtesy visit in June and U.S. Game Management Agent Harry Greenwald made frequent visits until his transfer to New Jersey.

Other visitors included officials from the Incorporated Village of Lloyd Harbor, various personnel from county and state organ-

izations; State Assemblyman Francis McClosky; Robert B. Burns, Regional Administrator, HUD, and representatives of various nature-oriented organizations.

Daniel Mills visited the refuge during his September sampling of Suffolk County freshwater ponds as part of a Cornell Cooperative Research analysis for the presence of Clostridium, botulinum.

Probably the refuge's most distant visitors were two delegates to the United Nations Assembly from New Delhi, India.

#### C. Refuge Participation.

May 4-6 Refuge Manager Gage traveled from Prime Hook National Wildlife Refuge for a refuge orientation trip with Assistant Regional Refuge Supervisor Merton Radway.

In May, refuge personnel were given the Defensive Driving Course (NSC) on the premises by William Forward.

May 15-17 - Refuge Manager Gage was present at Target Rock on special assignment to control indiscriminate use of the facility by the Eberstadt grandchildren.

June 22-24 - Regional Refuge Supervisor Horn and Manager Gage toured all Long Island refuges on an inspection trip.

July 7-8 - Manager Gage and Biologist Tschache (Morton) attended the Defensive Drivers Course at Brigantine National Wildlife Refuge.

August 27-28 - Manager Gage attended the Systems Management Workshop in Boston, Massachusetts.

September 16 - Manager Gage met with Hawk Hill Home Owners to discuss public use plans, related residential problems.

September 18 - A meeting was held with Messrs. Gerhard, Brody and Heath from SCOPE re development of an environmental program at Target Rock.

September 24 - Regional Director Griffith, Manager Gage, Mayor George Barclay and concerned citizens of the Incorporated Village of Lloyd Harbor met to discuss refuge problems and possible solutions.

October 8 - The Gages were guests at the annual dinner of the Great South Bay Waterfowlers Association.

November 10 - Manager Gage traveled to Dover, Delaware to participate in a preliminary hearing of a baiting case made on the Prime



Hook marsh in December, 1969.

November 24 - Manager Gage talked to 65 members of the Shinnecock Lodge of the Order of the Arrow regarding the refuge program and possible service projects.

The refuge manager began attending monthly meetings of the Lloyd Harbor Conservation Advisory Council in September. The film "So Little Time" was given four off-refuge showings to a total of 160 persons. Formal presentations were given to 145 persons on the refuge and several impromptu talks were given to various clubs and scout groups.

During the refuge manager's absence in August, Rodney Hanlon and Sam Waldstein, Assistant Managers from Bombay Hook and Great Swamp, respectively, were assigned to Target Rock during periods of heavy public use. Following the guidelines instituted by Public Use Specialist French and U.S. Game Management Agent Greenwald, they efficiently controlled the flow of traffic during the emergency period, improvising and improving on signs and disbursement of information. They are to be commended for handling a very demanding public with a good deal of tact. They would probably be the first to admit that this duty was a good training exercise and quite educational but that it does not bear repeating.

Information regarding the Long Island refuges was distributed to village, county and state agencies. Informal meetings were held with personnel of the Suffolk County Mosquito Control Commission, Suffolk County Parks Commission and personnel at the Ronkonkoma Regional Office of the New York State Environmental Conservation Office. Contacts were also made with State Senator Bernard Smith and U.S. Congressman Lester Wolfe.

#### D. Violations.

One case of breaking and entering occurred at the main house in May prior to refuge take-over. A determination of articles stolen was not possible due to the uncertain status of personal property since several relatives were removing personal belongings during this period. A local youth was later apprehended in possession of articles believed to be Eberstadt property but formal charges were never made then due to the family's uncertainty.

A variety of unauthorized uses occurred during the first couple months that the refuge was open. Initial problems were handled with a great deal of authority and tact by U.S. Game Management Agent Harry Greenwald. As the public became aware that the refuge was not open to a whole spectrum of recreational uses, many began to ask before they acted. Collecting, picnicking attempts, the presence of pets, illegal parking and illegal entry continued.

Drug use was much more prevalent than alcohol. While kids smoking "grass" on the grass were not bothersome, the collectors and souvenir hunters were. An estimated three tons of rocks were returned to the beach, brass faucet handles and shutter fasteners were confiscated and a truck load of shrub cuttings, flowers and other vegetation composted as a result. Serious vandalism and littering did not become problems.

After the initiation of the reservation system in October, the only reoccurring violations were illegal entry and parking. Since we have no means of imposing more than warnings for these minor violations, the village police have been most cooperative in giving their assistance, promptly ticketing any cars blocking the entrance.

Several incidences of illegal waterfowl hunting were noted in the vicinity of the refuge. There is a village ordinance prohibiting the discharge of firearms over water and, upon complaint (which is usually instantaneous), the police move in. However, their boats are dry-docked during the winter and certain baymen using high-powered boats have effectively evaded apprehension. If proposed legislation is enacted, any type of hunting within the Town of Huntington will soon become illegal. Such legislation has become fashionable in many of the more populated sections of Long Island.

#### E. Safety.

Basic safety equipment was acquired to augment the maintenance of the facility, including gloves, safety glasses, first aid kits and safety guards on tools and equipment. A roll bar and seat belts were installed on the donated Farmall tractor to make it comply with Bureau standards.

The 1951 Dodge pickup which was donated to the Bureau with the estate required a thorough inspection. Replacement of front springs and shocks now make it much safer for use.

A major obstacle which has not been completely overcome is public safety. Little can be done about access to the refuge but much remains to be done within. Many of the railings, steps and walks have been repaired but deterioration is extensive. Where facilities have been unsound, we removed them as an expediency but replacement of certain railings, etc. will be necessary. An example of the problem is the fire extinguishers. Although many exist, their last recorded check was during the mid-1940's. All are outmoded; most are non-functional. We have replaced those in the headquarters area but the thirty-odd room main house remains unprotected except for some partially dissolved carbon tetrochloride containers.

Periodic safety meetings were held and job safety was discussed

informally on a daily basis. Arrangements were made with the Suffolk County Health Department for periodic water quality tests to assure that bacteriological parameters are met.

## VII. OTHER ITEMS

### A. Items of Interest.

1. Personnel. Initial staffing of the refuge has been a problem. Two very capable men were, in a sense, gifted to the refuge by the Eberstadts. We soon lost Julius Wuest in retirement but Rocco Coronato remains and has wholeheartedly thrown himself into the refuge program. The Rockefeller family had offered Rocco a job and for awhile we were concerned that he might leave since a good estate gardener is worth \$10,000 and "keep". Aside from the personnel ceilings, a great deal of maintenance is required on this facility and even finding qualified temporary personnel who are willing to work in this higher economic area for government wages has been quite difficult.

During periods of heavy public use, the strain was so great on our meager staff that Biologist Buck Tschache had to be called in from Morton on occasion to assist in traffic control, despite the fact that Morton's parking lot was overflowing at times.

During the month of October, Biological Technician Will Nidecker from the Moosehorn refuge was assigned to Target Rock to assist in the control of public use during initiation of the reservation system. With Will's able assistance, a lot of other necessary work was also accomplished, including the posting of three refuges.

In October, Bruce Blunt, a local youth, was hired as a temporary intermittent laborer to assist in weekend public use control; tending gate and providing refuge information.

2. Local Interest. With a full scale of environmental pollutants surrounding them, Long Islanders possess a high degree of environmental awareness. Although everyone is talking about the subject today, Long Islanders are doing something about it. Enforceable legislation is being passed, recycling becoming a reality, detergents have been banned and environmental zoning being considered. These are a number of environmental suits in progress and action groups are innumerable. The local community has shown considerable interest in the refuge and the preservation of additional open space. Although they do not want to be overrun by general public use, they support

the development of an active environmental education program on Target Rock, fully realizing that some of their own children will benefit.

3. Death. Mrs. Mary Tongue Eberstadt died in New York City on October 15th. A memorial to Mr. and Mrs. Eberstadt is planned for placement in the lower arboretum.
4. Revenue Sharing. A Refuge Revenue Sharing Act check was presented to the Suffolk County treasurer in the amount of \$11,495.25 for four Long Island refuges. The amount paid for Target Rock was \$7,800 based on the 1.04 million dollar appraisal of July, 1970.
5. Credits. The report was prepared in its entirety by Refuge Manager George Gage; typed and assembled by Clerk-Typist Michele Sleva.

B. NR Forms. Applicable forms appended.

C. News Articles. Representative articles appended.

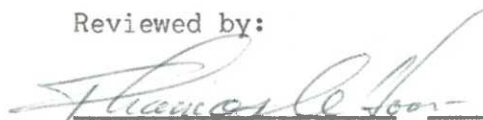
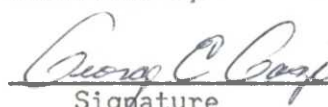
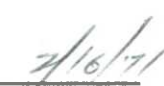
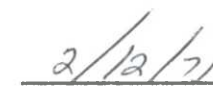
D. Photographs.

Appended. The black and white photos were taken by Refuge Manager Frederick Schmid. The remainder were taken by Manager Gage with a personal camera and are not too clear. This quantity of photos is included to give those who have not visited the area a pictorial view of one of our newest refuges.

.....

Reviewed by:

Submitted by:

	
Signature	Signature
	
Date	Date

NR's Checked in R.O. by 

3-1752  
 For R-2  
 (April 1946)

# UPLAND GAME BIRDS

Refuge Target Rock Months of January to December 19 70

(1) Species  Common Name	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
	Cover types, total acreage of habitat	Acres per Bird	Number broods observed	Estimated Total	per- centage	Hunting	For Re- stocking	For Research	Esti- mated number using Refuge	
<b>Bobwhite quail</b>	<b>80 acres of up- land; grasslands and brush.</b>		<b>2</b>	<b>10</b>	<b>50:50</b>				<b>40</b>	<b>Period of heaviest use - May - July.</b>
<b>Ring-necked pheasants</b>	<b>80 acres of up- land; grasslands and brush.</b>		<b>3</b>	<b>20</b>	<b>50:50</b>				<b>30</b>	<b>1 nest with clutch of 12 eggs found but broods observed were small.</b>
<p>The above records are based on cursory observations. The population fluctuated, declining noticeably during periods of heavy public use. Neighborhood cats and dogs roam unrestrained by any leash law and account for the heaviest source of predation locally.</p>										



# INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.\*

- |                     | (1) Species  | (2) Density | (3) Young Produced | (4) Sex Ratio | (5) Removals | (6) Total | (7) Remarks |
|---------------------|--|-------------|--------------------|---------------|--------------|-----------|-------------|
| (1) SPECIES:        | Use Correct common name.   |             |                    |               |              |           |             |
| (2) DENSITY:        | Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: Spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks. |             |                    |               |              |           |             |
| (3) YOUNG PRODUCED: | Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.  |             |                    |               |              |           |             |
| (4) SEX RATIO:      | This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.  |             |                    |               |              |           |             |
| (5) REMOVALS:       | Indicate total number in each category removed during the report period.   |             |                    |               |              |           |             |
| (6) TOTAL:          | Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.   |             |                    |               |              |           |             |
| (7) REMARKS:        | Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.  |             |                    |               |              |           |             |

\* Only columns applicable to the period covered should be used.

3-175-

Form NR-4

(June 1945)

## SMALL MAMMALS

December 31, 1970

Refuge

Target Rock

Year ending ~~April 30,~~

Dec 31, 1970

(1) Species	(2) Density	(3) Removals	(4) Disposition of Furs							(5) Total Popula- tion				
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control *	For Re- stocking	For Re- search	Share Trapping			Total Refuge Furs Shipped	Furs Donated	Furs Destroyed	
								Permit Number	Trappers Share	Refuge share				
Raccoon	80 acres:													8
Opossum	69 - brush and													10
Striped skunk	tinder,													2
Gray squirrel	3 - grasslands,													4
Cottontail rabbit	1 - marsh and													20
Muskrat	water,													3
Shorttail shrew	7 - other													abundant
Meadow vole														abundant
Red fox *														1
Mink *														1
Skunkay rat *														1
* Considered to be transient visitors. Only mink tracks were observed, not the individual.														
* List removals by Predator Animal Hunter														

\* Considered to be transient visitors. Only mink tracks were observed, not the individual.

\* List removals by Predator Animal Hunter

## REMARKS:

The above data based on cursory observations during the period June - December, 1970 and is included only as a historic record of mammals observed to date.

Reported by

GEORGE. GAGE



## INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, short-tailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.)
- (2) DENSITY: Applies particularly to those species considered in removal programs. Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year, including any taken on the refuge by Service Predatory Animal Hunter. Also show any removals not falling under headings listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market, including furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimeness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.
- (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.
- REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

Bureau of Sport Fisheries and Wildlife  
Division of Wildlife Refuges

# MONTHLY RECREATIONAL USE REPORT

Refuge name

**Target Rock**

State

**New York**

State

Code **12**  
(1-2)

Congressional

District Code **01**  
(3-4)

Refuge

Code **520**  
(5-7)

Report Yr. | Mo.

Period **7 D**  
(8-11)

**August -  
December  
(inclusive)**

(Card Columns). . . . . (12-13) (14-18) (19-25)

ACTIVITY	Code	VISITS FOR THE MONTH	
		Total Number	Total Hours
Hunting:			
Big Game	01		
Upland Game	02		
Waterfowl	03		
Other Migratory	04		
Other	05		
Bow	06		
Fishing:			
Salt Water	07		
Warm Water	08		
Cold Water	09		
Environmental Education	10	<b>280</b>	<b>470</b>
Wildlife Photography	11	<b>1415</b>	<b>6570</b>
Wildlife Observation	12	<b>4920</b>	<b>7794</b>
Conducted Programs	13		
Field Trials	14		
Wildlife Trails	15	<b>7026</b>	<b>11,004</b>
Wildlife Tours/Routes	16		
Visitor Contact Stations	17	<b>2417</b>	<b>1047</b>
Camping (wildlife related)	18		
Picnicking (wildlife related)	19		
Wildlife Interpretive Center	20		
On-Site Programs	21	<b>260</b>	<b>11</b>

(Card Columns). . . . . (12-13) (14-18) (19-25)

ACTIVITY	Code	VISITS FOR THE MONTH	
		Total Number	Total Hours
On-Site Programs	22	<b>140</b>	<b>4</b>
*Miscellaneous Wildlife	23		
Swimming	24		
Boating	25		
Water Skiing	26		
Camping	27		
Group Camping	28		
Picnicking	29		
Horseback Riding	30		
Bicycling	31		
Winter Sports	32		
Fruit, Nut and Vegetable Collecting	33		
*Miscellaneous Non-Wildlife	34	<b>4380</b>	<b>8760</b>
Peak Load Day	35	<b>1000</b>	
Actual Visits	36	<b>9901</b>	
Fee Area Use	37		
Number of Fee Areas	38	(14-18)	
Fee Collections	39	\$	
Collection Costs	40	\$	

**Code 34 - Miscellaneous Non-Wildlife:** During the first three months that the refuge was open to the public we were over-run by curiosity seekers bent on seeing how the Iberostadts lived; more interested in the messies and the formal grounds than nature-oriented activities. Such Sunday gawkers, in their suits and formal attire, have been lumped in this activity.



## Target Rock Gift Hits Lilco's Nuclear Plans

Eighty acres of woods, fields and shore line on Long Island Sound adjacent to Target Rock, a nautical landmark that according to local law was peppered with cannon balls in practice maneuvers by the British fleet during the American Revolution, has been donated to the Federal government as a wildlife preserve.

There was speculation that the gift scored a direct hit that may sink plans of the Long Island Lighting Company to erect a \$150 million nuclear generating plant on a site that was to include the 80 acres.

The land, known as Target Rock Farm, lies at the eastern tip of Lloyd Neck. It was given to Department of the Interior by the owners, Mr. and Mrs. Ferdinand Eberstadt. Eberstadt, who also has homes in New York and Florida, is an investment banker.

### Lilco Cites Tax Loss

Lilco took a cautious stand. "We don't know yet exactly the relationship of the land to the site we had under consideration," said a Lilco spokesman. He added, "with this, and the Caumsett estate taken for a state park,

they are losing a lot of land to non-tax paying institutions."

The 2-acres-and-up estate village had protested after Lilco made known its plan last September to the village board. The board had noted the taxpaying advantages but took no formal stand.

Eberstadt refused to state his attitude for the proposed generator. But he said, "after living here for 40 years and raising our children and grandchildren here we very much want it to continue to be used as a wildlife refuge."

The estate is frequented by migratory ducks, woodcocks, cranes and osprey, according to residents, and includes brackish pond off Lloyd harbor.



# Long-Islander.

AN INDEPENDENT PAPER DEVOTED TO NEWS, LITERATURE, MORALS, TEMPERANCE, ETC.

Huntington, L. I., N. Y.—Thursday, December 21, 1937

## Eberstadt Gives US Part of Farm

Frank Eberstadt has donated eighty acres of his farm, known as Target Rock, to the Department of Interior as a gift to be used for the care, preservation and use of wild life and as a sanctuary for birds. The papers consummating the transfer of the property to the Bureau of Sport Fisheries and Wild Life were signed in Washington on Monday, Mrs. Ann Carl of Lloyd Lane reported before the Lloyd Harbor trustees at a meeting Monday night in village hall. Mrs. Carl's report was greeted with shouts of approval.

Residents of Lloyd Harbor and particularly those of Lloyd Neck, where the Eberstadt property is located, feared that the Long Island Lighting Company might acquire some of the Target Rock land for their plans to bring a nuclear energy plant on Lloyd Harbor. The company has already purchased forty acres of the Hambuechan property adjacent to the Eberstadt farmland.

The Eberstadts, residents of Lloyd Harbor for 40 years reportedly expressed the hope that the residents of Lloyd Harbor would enjoy the wild life sanctuary for which their property will be adopted by the government. The land will be established as a scientific center for studies of bird and animal life under the most advanced facilities. Small and privately conducted lectures and meetings will be held periodically. The arrangement will not open the area to heavy road traffic.



# Target Rock Refuge to Be Study Area

Target Rock National Wildlife Refuge, the 70-acre Lloyd Neck Estate deeded to the U.S. Interior Department last year by Mrs. Ferdinand Eberstadt, will become a controlled nature study area for State University at Stony Brook graduate projects and other authorized school groups.

It also will be the central offices for a wildlife administrator, George Gage, who will arrive from Delaware next month to manage it and other department properties around Long Island.

Plans for the Target Rock Estate, on the southeast tip of Lloyd Neck, were unveiled last night to representatives of Lloyd Harbor and Huntington Town by Richard Griffith, the federal department's chief for the Northeast.

Griffith said the main house will be used for seminars and departmental conferences. He stressed however, the donors were promised the property will remain a refuge in its natural state and he said that the general public will not have casual access" to it.

Griffith also made a preliminary report on the possibility of extending the Oyster Bay Wildlife Refuge eastward. He said the Lloyd Harbor area appears to be of major importance to migratory birds as do some areas farther east. He said more consultation with local communities and wildlife observers must be had before making a conclusive report.



Richard Griffith shows Interior Department report to Mrs. R. Page Burr, Supervisor Jerome Ambro, standing left, and E. Z. Gray.

The meeting was presided over by E. Z. Gray, co-chairman with Mrs. R. Page Burr of the Lloyd Harbor Conservation Council. It was attended by Huntington Supervisor Jerome A. Ambro, Town Councilman Richard V. Holahan, Town Attorney Nicholas LaCarrubba and Town Conservation Chairman William McAneny, as well as the Lloyd Harbor committee.

LONG ISLAND PRESS, THURSDAY, MAY 21, 1970



## A Natural Treasure for LI

## Financier's Lands Now a Federal Preserve

By ESTELLE SAMMIS

A new treasureland of primal forest, sweeping lawns, formal gardens, miles of woodland trails, sandy shores, a natural pool, a Georgian mansion, and a Revolutionary landmark have come into public possession for the nation, with Long Island residents as the at-home beneficiaries.



**FERDINAND EBERSTADT**  
A Gift to the People

Lloyd Neck, was the gift of international financier Ferdinand Eberstadt, who died last year, and his wife, Mary, with whom he would have celebrated a golden wedding last New Year's Eve.

**THE DONATION** of his estate to the Department of Interior was the final coup in the lifetime of a man whose financial wizardry and brilliant thinking served the nation in times of stress. Eberstadt chaired the Army-Navy Munitions Board in 1942; was vice chairman of the War Production Board in '42 and '43, was a U.S. Navy civilian advisor, a member of the Board of Visitors at the Naval Academy, and served on the Hoover Commission and the National Security Resources Board.

How he found time to import thousands of rare trees and plants, map them, and write profiles on each bit of green lovingly planted in his earth, nobody knows. Then, a few years ago, he and Mrs. Eberstadt heard that the Long Island Lighting Company wanted to condemn their estate as part of the land they are assembling for a Lloyd Neck nuclear generator.

The Eberstadts took the news silently. A few days later they went to Washington, and shortly thereafter came the news that Target Rock Farm had been deeded to the Department of Interior for a wildlife refuge, safe forever from bulldozers, brick and mortar, and chain saws. They were to live out their lives on the Estate, however.

Eberstadt enjoyed what he had done. He said it gave him great peace of mind. But his days were numbered, and the man born in Manhattan June 19, 1890, died last Nov. 11.

Mary Tongue Eberstadt soon decided that she could no longer live at Target Rock, where she had spent the happy years since 1928. Their children, Frances, Stuart, Mary, Fred, and Ann had their own homes, and Mrs. Eberstadt told the Interior Department it could take possession of the property now, providing two long-time family retainers, Julius Wuest and Rocco Coronato, who know and love every inch of the property, were transferred to the departmental payroll. They are there, pruning the roses and taking care of things just as they always did.

**"IT'S THE PRETTIEST PLACE** I ever saw," exclaimed 31-year-old George Gage, the Refuge manager at Target Rock and project leader for all Department of Interior Refuges on Long Island. Gage, his young wife, Judy, and their children, Kimberley, 7, and Brett, 3, came here recently from the Delaware Marshes Refuge at Milton, Del., where they served three years. Gage is a native of Saratoga Springs, but he and Judy met when they were students at Utah State University.

The Gages are living in the Paddock House, near the estate gate. They brought their own furniture, paid a fifth of his salary for the house, and will use a wing for an office where Gage will run the multi-million dollar establishment with its priceless natural heritage.

Starting right now the public can use Target Rock Wildlife Refuge for the "permitted purposes of photography, nature study, and hiking on roads and trails, and use the beach from 9 a.m. to 6 p.m. daily, year round."

This means, no picnicking, no bonfires, no smoking, no destruction or defacing of plant or wildlife, and no parking except in specific areas. A person or a whole nature class may walk through 10 acres of gardens, miles of wooded trails, for study and pleasure. They will be asked to register, and may telephone (516) 427-6450 to say they are coming.



Target Rock, a huge boulder in the waters off the tip of Lloyd Harbor, was used for gunnery practice by the British Navy during the Revolutionary War. It gives the former Eberstadt estate its name of Target Rock National Wildlife Refuge.



An official emblem of the U.S. Department of the Interior posted with mail boxes at the Eberstadt grounds indicates its status as a federally-protected preserve.



A sanctuary for birds and tiny creatures, the Target Rock woods abound with varieties seldom seen. This house is occupied by Purple Martins.



Wildflowers and rare plants and trees are tenderly cared for on the Target Rock estate. Nature trails are open to visitors to use with care.



THURSDAY, AUGUST 13, 1970

## **400 Cars Crowd Wildlife Refuge**

An apparent misunderstanding over the regulations governing public use of the recently opened Target Rock National Wildlife Refuge, in Lloyds Neck, caused confusion on Sunday when some 400 carloads of people went to the Refuge, thinking the beach area there was open for swimming and picnicing. The Refuge is equipped to handle no more than 30 car parking, and officials told The Long-Islander this week that the regulations specifically do not permit swimming, picnicing, or fishing there.

Entrance to the Refuge, officials said, does allow the public to go in "for the purpose of photography, nature study, and hiking on roads, trails, and the beach from 9 am to 6 pm. Pets, they said, are permitted in the parking area only and cars are limited to the designated parking area.

William French, a staff specialist with the Bureau of Sport Fisheries and Wildlife, explained that the confusion apparently came about from a recent article on the Refuge, which implied "use" of the beach. It was probably misinterpreted to mean that the beach could be used for swimming, picnicing, and fishing, French said, adding again that none of these activities are permitted.



**Newsday**

# Overwhelming A Retreat

Lloyd Harbor—The U.S. Interior Department opened a wildlife refuge here this summer and attendance has been good—too good, in fact.

Last Sunday, more than 400 cars arrived at the 80-acre preserve which has facilities for 30 cars, and that was only part of the problem. According to officials of the U.S. Fish and Wildlife Service, the persons in the cars were expecting swimming, bicycling, fishing and picnicking. None of those activities is permitted at the Target Rock National Wildlife Refuge, which was opened for nature study and wildlife appreciation. Activity at the refuge which is open daily from 9 AM to 6 PM throughout the week, is limited to photography, hiking and nature study.

William L. French, a staff specialist with the service, said yesterday that the weekend traffic jam was also a problem for area residents, as disappointed visitors backed their cars onto lawns while turning around. No emergency equipment would have been able to get through the congestion, he said.

The refuge is at the east end of Lloyd Neck, running onto East Beach. It was the estate of Ferdinand Eberstadt, who bequeathed the property to the federal government in 1967. After his death last year, Mrs. Eberstadt told the Interior Department that it could have the estate. The property includes a home, one of the island's few remaining untouched stands of native hardwood, a formal garden, a small pond and some wetlands. French described it as "an area where you'd spend a half-hour walking around and then leave." And that's what he hopes visitors will do henceforth.

Thursday, August 13, 1970 •



# An old mansion weaves its spell

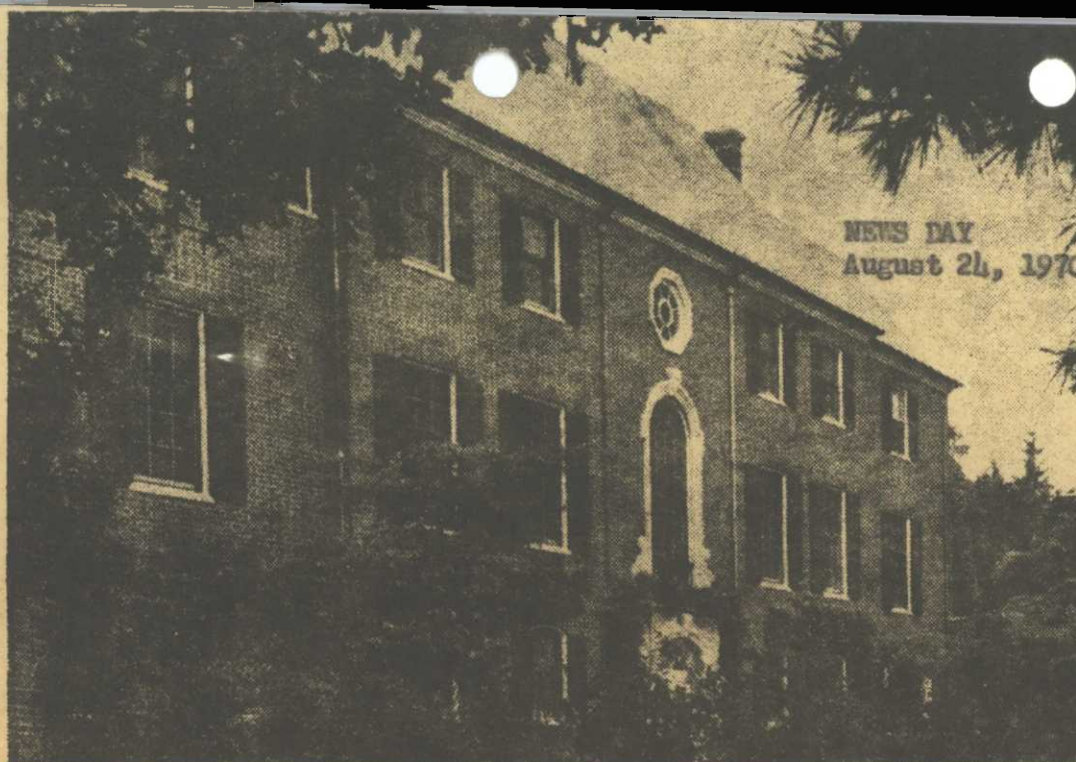
By Leslie Hanscom

The Island's newest natural parkland to be opened to the public is the Target Rock wild life center in Lloyd Harbor. It doesn't have much wild life in residence—apart from crows, crickets, sea gulls and a squirrel or two—but all wild things which want to move in are welcome. What is less welcome, in the regretful judgment of the U.S. Fish and Wildlife Service, which administers the park, is large hordes of human visitors. Sunday before last, some 400 cars turned up at the 88-acre preserve, and the authorities got very uptight about the burden on its parking facilities which can accommodate less than a fourth of that number.

The refuge, which used to be the estate of Ferdinand Eberstadt, a high-powered financier who died last November, is located at the east end of Lloyd Neck among other estates that are still in private hands. After the first weekend jam-up, the residents of the Neck groused about the crowding, the visitors groused about being turned away with their picnic hampers from what they thought was a beach facility and the Fish and Wildlife Service groused about misleading publicity which distorted the image of what was meant to be a haven for bird watchers and nature strollers. It all gave an unwelcome flavor of tumult to the opening of a retreat for seekers after solitude and serenity.

Solitude and serenity are to be found there, but to find them, go during the week. It is late in the game to do it, but it is also preferable to blunder into the refuge by accident. The signs along the wooded road leading to the estate declare that unauthorized entry is prohibited, and there is just enough ambiguity in this to give you a delicious sense of trespassing where you don't belong. Nor is there anything in the signs or the approach to prepare you for the apparition of grandeur that arises as you round a clump of mountain laurel on foot and find yourself in the backyard of the baronial manor which was the headquarters of what Ferdinand Eberstadt called his "farm."

As the present owner, the U.S. Government intends the estate to be a place for studying wild life, but as it now stands, it is far more striking for the insight it affords to the high



Newsday Photo by Jim O'Rourke

*'Around a clump of laurel you come upon a baronial manor.'*

life. The house is not yet shuttered and labeled, and it conveys the feeling that the inhabitants are only temporarily absent, perhaps for the season in Saratoga. Shortly the bailiff will show up and chuck you off the grounds. In the meantime, do you dare to ring the bell at that imposing door, above which the neo-Georgian masonry towers for three stories? You ring, and there is silence. Perhaps it is disconnected; perhaps the sound is lost in the vastness of the empty mansion.

For all the reported hubbub of the weekend, it is possible to prowl the estate on a weekday afternoon in uninterrupted solitude. In the circumstances, Walter Mitty fantasies unavoidably fill your head. (The place is mine. I found it here waiting for me. I was born to be lord of a layout like this.) The house crowns a hill, spilling down the slope at the back so that there is an extra story on the rear side. At the front there is a high oval lawn with a view of the sailboats on the Sound through ancient oak trees. From the lawn, a stairway leads down through descending terraces—with a boxwood labyrinth at

one level—to a path that winds away into an infinitely romantic forest.

According to William French, an official of the Fish and Wildlife Service who oversees the Target Rock refuge from a desk in Boston, "The attention span of the average visitor there ought to be about an hour and a half." That may apply to the visitor who is looking for herons and raccoons, but the day-dreamer who gets caught in the spell of placing himself in the shoes of Ferdinand Eberstadt as lord of the manor will want a little more time. The temptations are unlimited. If you peep through the French doors that open toward the cedar walk, the sofa still stands by the fireplace, and there is a stack of sheet music on a chair.

For the dedicated nature viewer, the forest paths lead away in all directions, notably to the steep cliffs which overlook Target Rock itself, the mammoth boulder out in the Sound which the British once used for gunnery practice. For the incorrigible fantasist, all paths lead back to Ferdinand Eberstadt's "farmhouse." /II



## *Says Public Must Learn Purpose of Wildlife Refuge*

Two months after the opening of the Target Rock Wildlife Refuge at Lloyd Harbor, village officials are still concerned that the general public does not understand that the beautiful shorefront estate now owned and operated by the U.S. Department of Interior is neither a bathing beach nor a picnic ground.

The 83-acre estate, given by the late Ferdinand Eberstadt and his wife, Mary, is governed by specific regulations published by Richard E. Griffith, regional director, Bureau of Sport Fisheries and Wildlife. They are being enforced by George Gage, the refuge manager, who also has responsibility for other Interior Department wildlife refuges on Long Island.

The regulations state that "Entrance to the refuge is permitted for the purpose of photography, nature study and hiking on roads, trails and the beach from 9 a.m. to 6 p.m. Pets are permitted in the parking area only. Motor vehicles are limited to the designated parking area."

Lloyd Harbor Mayor George Barclay, who has been dismayed by the number of cars traveling the narrow road to the refuge under the impression that the beach was for bathing and picnicking, says he hopes this will soon end and the people will understand the purpose of the refuge is quiet protection of bird and wildlife and only passive visitor enjoyment for an "hour or two."

Gage and his small staff are expecting that as schools and ecology students learn of the refuge it will be visited by classes who call ahead for appointments and by occasional visitors who enjoy the quiet woodland and the rare trees, and who will observe rules against matches, food, and bathing, and will confine their enjoyment to observing nature, hiking and photography.

LONG ISLAND PRESS, SUNDAY, OCTOBER 4, 1970

## *Wildlife Refuge Adopts a New Visitor Policy*

The new Target Rock Wildlife Refuge in Lloyd Harbor is adopting a reservation system for visitors, effective immediately.

Persons seeking entry should notify the preserve at least one week in advance. Permits will be mailed to prospective visitors and must be presented at the gate for admission.

The 80-acre refuge, one of the Department of the Interior's newest preserves, is on the eastern tip of Lloyd Neck.

A former estate, the land was donated to the Bureau of Sport Fisheries and Wildlife in 1967, to be used as a nature study area.

The preserve was opened to the public July 9.

Included in the picturesque refuge is some 2,000 feet of Huntington Bay shoreline.

Plans are now in the works for the development of the sanctuary as administrative headquarters for all Long Island wildlife refuges.

In spite of limited access and facilities, the refuge has swarmed with visitors since opening.

According to Refuge Manager George Gage, the general public has literally overrun the grounds, expecting a park-like atmosphere where they might fish, picnic and swim.

"These forms of recreation are not consistent with the refuge's purpose and cannot be tolerated on an area of this size," he said.



Newsday

Monday, October 5, 1970



Newsday Photo by Don Jacobsen

Gate at Now-Quiet Target Rock Refuge Proclaims New Reservation Policy

# *Nature's Gatekeepers Ration the Attractions*

'... The serious ecological types tiptoe through the bushes whistling bird calls and such.'

By Kent D. Smith

Lloyd Harbor—If you use the word "park" at the gates of Target Rock National Wildlife Refuge here, you will undoubtedly draw a wince from the refuge manager, George Gage.

Gage will quickly explain, "This is not a park. We have a controlled nature area. That's all it is, and it doesn't lend itself to widespread public use. A lot of people come here looking for a state park with picnicking, swimming and fishing, which we don't allow," Gage said. "Our role is nature preservation, and we will be darned hard-nosed about every violation," Gage said.

The refuge encompasses 80 acres of rolling forest land engraved with narrow, leaf-covered walking paths. It was acquired by the U.S. Interior Department in 1967 and was opened for limited use as a wildlife preserve in July. Since the refuge's opening, however, it has seen some heavy traffic, according to Gage. "On a normal Sunday, we've had up to 500 individuals seeking admission. We've been at overflowing capacity here every Sunday," Gage said. The refuge parking lot can accommodate only 20 cars, and the road leading to the area narrows to 10 feet in some spots. Since last week when the refuge officials began a policy of visits by reservation only, attendance at the facility has dropped considerably, to the delight of Gage and other wildlife observers. In fact, only about 30 people visited the area yesterday, and 20 of those were members of a cycle club who walked their bikes through the area before returning home.

William B. Kostiw of Flushing, the vice president of the New York Cycle Club, leaned on his racer as he admired the surroundings. "This area is one which is absolutely essential to the New York area," Kostiw said. "We definitely feel it should be reserved for wildlife because it's so small that it can be easily overrun by picnickers." He and his fellow cyclists began their trip in Syosset. "We haven't seen any wildlife, but the flora is exceptional," he said. According to Gage, quail, dove, pheasants, rabbits, and racoons all inhabit the area in addition to an increased number of water fowl in the winter.

Gage also noted a distinction among visitors to Target Rock. "You don't find the same kind of people on Sunday as you get on weekdays, when the serious ecological types tiptoe through the bushes whistling bird calls and such. On Sunday, you get the Sunday riders," Gage said. At least 6,000 persons already have visited the area, according to Gage.

Ed Joyce, a junior high school science department chairman who lives in East Northport, wasn't tiptoeing through any bushes, but he and his family were enjoying themselves among the various species of flora and fauna. "I'm particularly interested in wild flowers and birds," said Joyce as he scanned the surrounding growth. "I see some nonpoisonous sumac, some wild roses, bayberries and dogwood." Joyce also said that he approved of the new restrictions on the refuge. "It hasn't been touched, and it would be a shame to have this place burn down," Joyce said.

Quotes and misquotes for a little sensationalism.



## WILDLIFE REFUGE LIMITS VISITORS

Target Rock Preserve Will  
Admit 50 Persons a Day

Special to The New York Times

LLOYD HARBOR, L. I. Oct. 10—The gates are open to only 50 visitors a day at the Target Rock National Wildlife Refuge, but still large crowds try to gain entry to the quiet 80 acres on Long Island's North Shore.

Target Rock, formerly the estate of Ferdinand Eberstadt, is situated on Long Island Sound adjacent to land considered by the Long Island Lighting Company for a future nuclear power plant and several miles away from Gaumsett State Park, which is undeveloped.

The wildlife refuge was closed Oct. 1, except to those who have permits, issued mainly to persons interested in nature study. It has been deluged with mail and phone requests for entry, and people seeking entry at the gates. Last Sunday, 277 persons were turned away.

George Gage, manager of the refuge, said that the Department of Interior set up the permit system because, since the wildlife preserve opened July 9, it has been overrun with picnickers, fishermen, sightseers, motorcycles and people with pets. In its first three months of operation, more than 7,000 people visited the refuge. More than 400 cars came to park in an area that has parking for 20 vehicles.

### Real Problem Cited

The real problem is that most visitors are looking for a recreational area, according to Mr. Gage. "They see Gaumsett State Park on the map, and turn off the expressway to go there," he explained. "When they find out that they can't get in they come further down the road to Target Rock."

The refuge, which is on the east end of Lloyd Neck and in the Town of Huntington, was bequeathed to the Federal Government late in 1967 by Mr. Eberstadt, who died last year. His widow notified the Interior Department early this year that it could have the estate.

The area contains rolling forest land with narrow walking paths. A three-and-a-half-story mansion with many rooms, a formal garden, a small brackish pond, a stand of native hardwood, wetlands and about 2,000 feet of shoreline where Huntington Bay meets Long Island Sound.

THE NEW YORK TIMES.

SUNDAY, OCTOBER 11, 1970



THE LONG-ISLANDER, HUNTINGTON, L.I., N.Y.

THURSDAY, DECEMBER 24, 1970

SECTION TWO—PAGE SEVEN

### **Federal Funds Come to Suffolk**

Suffolk County will receive \$11,498.00 from the Federal Government for real property administered by the Bureau of Sports, Fisheries, and Wildlife, Department of the Interior, as recently reported by Frederick C. Schmid of the Morton National Wildlife Refuge in Sag Harbor, Long Island. Lands are acquired by the bureau through bequests, purchases, and transfer from other agencies, and are vitally needed in the ever-shrinking acreages of open space on Long Island.

In the township of Huntington, the Target Rock National Wildlife Refuge, which is the former estate of Frederick Eberstadt in Lloyd Harbor, was bequeath to the Bureau of Sports, Fisheries and Wildlife by his widow, since deceased.

The money received by the county in which refuge lands are situated represents a shared revenue provision of Public Law 87-363 and the percentile share based on the Eberstadt appraisal of July 1, 1970 is \$7,800.00, and the county can expect to receive that amount each year.

THE LONG-ISLANDER, HUNTINGTON, L.I., N.Y.

-Thursday, October 29, 1970

## Missing Baby Found in Woods

Village Highway Department worker R. Giacco found missing two and one half-year-old Elizabeth King safe in the woods last week about one-fourth a mile from her Oakwood Drive, Lloyd Harbor, home after an intensive 2-hour search for the missing infant by some 20 police, highway department, and federal wildlife Commission workers.

According to Lloyd Harbor police, the search began at 11:45 A.M., Tuesday, after the infant was reported missing by her parents, Mr. and Mrs. Nicholas King. Village police called in off-duty members of their force and were also assisted by men from the Village Highway department, L. I. State Park Commission Police and 1 Rangers from the federal Wildlife Commission also took part in the search. Giacco found the girl at about 1:30 P.M.

Five days earlier, Elizabeth was found wandering on the beach within a half hour after she was also reported missing.

In spite of all our publicity, of which only a representative sample is appended, we still retained that good old Smoky Bear image.

Part of the scenic approach to Target Rock borders Lloyd Harbor. This important wintering ground for black ducks and greater scaup may become part of the adjacent Oyster Bay National Wildlife Refuge.

Gage, TR-70-R8-4

Public access to the refuge is a serious problem. The entrance road is privately owned, narrow, steep and winding; at this point only 10 feet wide.

Gage, TR-70-R5-11





With cypress siding and a slate roof, the Refuge Manager's residence looks like a nice place to live.

Gage, TR-70-R2-22

But public use soon changed all that. This temporary parking facility was constantly overflowing during August and September. In October, we began a reservation system and the parking area was reduced to a 20 car limit, moving our problems at least out of the dooryard.

Gage, TR-70-R4-2







Approximately 4,300 visitors did not come for wildlife-oriented recreation. Included were those among the affluent society who were interested in how the Eberstadts lived, and these high-heeled Sunday "hikers" were especially rough on the lawns, actually powdered the trails.

Gage, TR-70-R5-2

One of the main public attractions on the refuge are the extensive plantings of azaleas and rhododendrons.

Gage, TR-70-R1-12



Part of the understanding in the deeding of the Eberstat Estate was that the government retain two faithful employees. Julius Wuest had been with the family for forty years, proved to be a willing and able worker; retired in July at the age of 70.

Gage, TR-70-R2-21

Maintenanceman Rocco Coronato had been with the Eberstadt family for fifteen years. A man doesn't retain muscles like that at the age of 65 from taking life easy. Rocco is a hustler!

Gage, TR-70-R2-12





And here is what keeps him busy; grass, flowers and shrubs, all  
maintained with finesse.

Gage, TR-70-R2-13

Each shrub in the lower "garden" is individually blueprinted and  
profiled.

Gage, TR-70-R1-6





The refuge includes 2,000 feet of shore frontage on Huntington Bay. In addition to the beach cottage and pier, one finds a good interspersion of habitat types along the southeastern boundary. This diversity will provide many subjects for ecological interpretation.

Gage, TR-70-R2-5

The three and one-half story Eberstadt mansion (main house) as seen from the back. Its use as an environmental education center is in the planning stage.

Gage, TR-70-R10-3

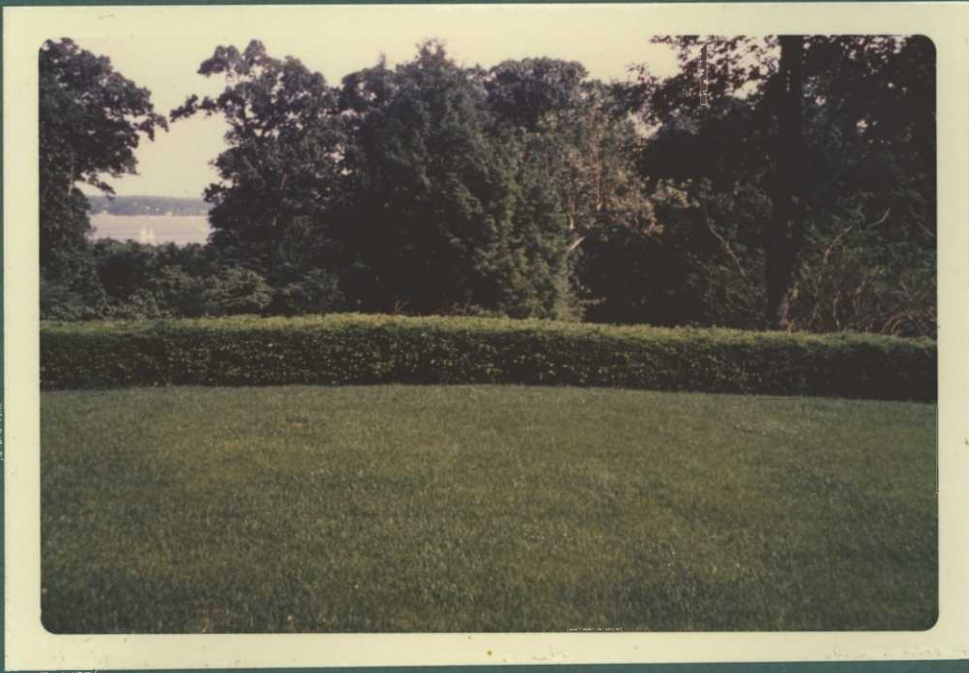






The lawn and hedge at the main house were a lush green in May.  
Gage, TR-70-R1-5

In September, the same lawn and hedge but a different vista.  
The long dry period had taken its toll. The hedge recuperated;  
some sections of lawn and a dozen rhododendrons did not.  
Gage, TR-70-R3-19



Target Rock as seen from the bluff overlook at low tide. Maintenance man Coronato stands in front of rock pointing to the high tide mark above his head.

Gage, TR-70-R9-4.

The proposed site of the Long Island Lighting Company's nuclear power plant may be seen by looking northwest from the overlook. This section of unspoiled shore provides an important spawning ground and is heavily used by wintering concentrations of waterfowl.

Gage, TR-70-R9-3.





The front of the main house as seen from the driveway.





Extensive alees from the mansion give one views of Huntington Harbor  
and Long Island Sound.



One of the "west" walks from the boxwood maze at Target Rock.







UPLAND GAME BIRDS

Refuge Target Rock Months of January to December 19 70

(1) Species  Common Name	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
	Cover types, total acreage of habitat	Acres per Bird	Number broods observed	Estimated Total	per- centage	Hunting	For Re- stocking	For Research	Esti- mated number using Refuge	
Bobwhite quail	80 acres of up- land; grasslands and brush.	1	2	10	50:50				45	Period of heaviest use - May - July.
Ring-necked pheasants	80 acres of up- lands; grasslands and brush.		3	20	50:50				38	1 nest with clutch of 12 eggs found but broods observed were small.
<p>The above records are based on cursory observations. The population fluctuated, declining noticeably during periods of heavy public use. Neighborhood cats and dogs roam unrestrained by any leash law and account for the heaviest source of predation locally.</p>										

## INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES: Use Correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: Spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.

(4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.

(5) REMOVALS: Indicate total number in each category removed during the report period.

(6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.

(7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

\* Only columns applicable to the period covered should be used.



3-1754  
Form NR-4  
(June 1945)

# SMALL MAMMALS

December 31, 1970

Refuge Target Rock

Year ending ~~April 30,~~

(1) Species	(2) Density	(3) Removals	(4) Disposition of Furs							(5) Total				
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control *	For Re- stocking	For Re- search	Share Trapping			Total Refuge Furs Shipped	Furs Donated	Furs Destroyed	Popula- tion
								Permit Number	Trappers Share	Refuge share				
Raccoon	80 acres:													8
Opossum	69 - brush and													10
Striped skunk	timber,													2
Grey squirrel	3 - grasslands,													40
Cottontail rabbit	1 - marsh and													20
Muskrat	water,													5
Shorttail shrew	7 - other													abundant
Meadow vole														abundant
Red fox *														1
Mink *														1
Norway rat *														1
* Considered to be transient visitors      Only mink tracks were observed, not the individual.														
* List removals by Predator Animal Hunter														

\* Considered to be transient visitors. Only mink tracks were observed, not the individual.

\* List removals by Predator Animal Hunter

## REMARKS:

The above data based on cursory observations during the period June - December, 1970 and is included only as a historic record of mammals observed to date.

Reported by

GEORGE E. GAGE

## INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i. e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, short-tailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan.)
- (2) DENSITY: Applies particularly to those species considered in removal programs. Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year, including any taken on the refuge by Service Predatory Animal Hunter. Also show any removals not falling under headings listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market, including furs taken by Service personnel. Total number of pelts of each species destroyed because of unprime-ness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.
- (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.
- REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.



Bureau of Sport Fisheries and Wildlife  
Division of Wildlife Refuges

MONTHLY RECREATIONAL USE REPORT

Refuge name - Target Rock

State New York

State  
Code 32  
(1-2)

Congressional  
District Code 01  
(3-4)

Refuge  
Code 520  
(5-7)

Report Yr. | Mo. August -  
Period 70 | December  
(8-11) (inclusive)

(Card Columns). . . . . (12-13) (14-18) (19-25)			
ACTIVITY	Code	VISITS FOR THE MONTH	
		Total Number	Total Hours
Hunting: Big Game	01		
Upland Game	02		
Waterfowl	03		
Other Migratory	04		
Other	05		
Bow	06		
Fishing: Salt Water	07		
Warm Water	08		
Cold Water	09		
Environmental Education	10	230	470
Wildlife Photography	11	1415	6570
Wildlife Observation	12	4920	7794
Conducted Programs	13		
Field Trials	14		
Wildlife Trails	15	7016	11,004
Wildlife Tours/Routes	16		
Visitor Contact Stations	17	2417	1847
Camping (wildlife related)	18		
Picnicking (wildlife related)	19		
Wildlife Interpretive Center	20		
Off-Site Programs	21	160	11

(Card Columns). . . . . (12-13) (14-18) (19-25)			
ACTIVITY	Code	VISITS FOR THE MONTH	
		Total Number	Total Hours
On-Site Programs	22	145	4
*Miscellaneous Wildlife	23		
Swimming	24		
Boating	25		
Water Skiing	26		
Camping	27		
Group Camping	28		
Picnicking	29		
Horseback Riding	30		
Bicycling	31		
Winter Sports	32		
Fruit, Nut and Vegetable Collecting	33		
*Miscellaneous Non-Wildlife	34	4380	8760
Peak Load Day	35	1500	
Actual Visits	36	9901	
Fee Area Use	37		
Number of Fee Areas	38	(14-18)	
Fee Collections	39	\$	
Collection Costs	40	\$	



Code 34 - Miscellaneous Non-Wildlife: During the first three months that the refuge was open to the public we were over-run by curiosity seekers bent on seeing how the Eberstadts lived; more interested in the mansion and the formal grounds than nature-oriented activities. Such Sunday gawkers, in their suits and formal attire, have been lumped in this activity.